

July 17, 2001

Mr. Warren Ewalt
Caterpillar, Inc.
3701 State Road 26 East
Lafayette, IN 47905

Re: **157-14386**
Second Minor Permit Modification to
Part 70 No.: T 157-7594-00044

Dear Mr. Ewalt:

Caterpillar, Inc. was issued a Part 70 operating permit (T 157-7594-00044) on July 13, 1999 for stationary internal combustion engine manufacturing source. A First Administrative Amendment (157-11363-00044) was issued on October 25, 1999, a First Significant Source Modification (157-11970-00044) was issued on May 15, 2000, a Second Administrative Amendment (157-11889-00044) was issued on May 22, 2000, a Third Administrative Amendment (157-12447-00044) was issued on August 4, 2000, a Second Significant Source Modification (157-12768-00044) was issued on January 4, 2001, and a Fourth Administrative Amendment (157-12859-00044) was issued on January 5, 2001. A First Minor Source Modification (157-14260-00044) was issued on May 25, 2001, and the First Minor Permit Modification (157-14388-00044) to operate that modification will be issued prior to issuance of this Second Minor Permit Modification. A letter requesting changes to this permit was received on May 14, 2001. Pursuant to the provisions of 326 IAC 2-7-12, a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

This modification revises the descriptive information to include the existing one (1) British Petroleum/ Dowell and oil fracturing rig testing site. The requirements removed in the third Administrative Amendment 157-12447-00044, issued on August 4, 2000, are added to the permit as Section D.9 and now reference the one (1) British Petroleum/Dowell and oil fracturing rig testing site. There is no new construction and no modifications to the existing source at this time.

All other conditions of the permit shall remain unchanged and in effect. The entire updated permit is being provided for your convenience.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
CAO/MES

cc: File - Tippecanoe County
U.S. EPA, Region V
Tippecanoe County Health Department
Air Compliance Section Inspector - Eric Courtright
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michelle Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Caterpillar, Inc.
3701 State Road 26 East
Lafayette, Indiana 47905**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 157-7594-00044	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: July 13, 1999 Expiration Date: July 13, 2004

First Administrative Amendment 157-11363-00044, issued on October 25, 1999
First Significant Source Modification 157-11970-00044, issued on May 15, 2000
Second Administrative Amendment 157-11889-00044, issued on May 22, 2000
Third Administrative Amendment 157-12447-00044, issued on August 4, 2000
Second Significant Source Modification 157-12768-00044, issued on January 4, 2001
Fourth Administrative Amendment 157-12859-00044, issued on January 5, 2001
First Minor Source Modification 157-14260-00044, issued on May 25, 2001
First Minor Permit Modification 157-14388

Second Minor Permit Modification: 157-14386-00044	Conditions Affected: A.2; Section D.9 and a report form are added to the permit
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 17, 2001

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONDITIONS

- B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]
- B.2 Definitions [326 IAC 2-7-1]
- B.3 Permit Term [326 IAC 2-7-5(2)]
- B.4 Enforceability [326 IAC 2-7-7(a)]
- B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.6 Severability [326 IAC 2-7-5(5)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]
- B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]
- B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1)
and (6)] [326 IAC 1-6-3]
- B.13 Emergency Provisions [326 IAC 2-7-16]
- B.14 Permit Shield [326 IAC 2-7-15]
- B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]
- B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
- B.18 Permit Renewal [326 IAC 2-7-4]
- B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]
- B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
- B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]
- B.22 Operational Flexibility [326 IAC 2-7-20]
- B.23 Construction Permit Requirement [326 IAC 2]
- B.24 Inspection and Entry [326 IAC 2-7-6(2)]
- B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]
- B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

C SOURCE OPERATION CONDITIONS

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates
Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- C.7 Stack Height [326 IAC 1-7]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.10 Compliance Schedule [326 IAC 2-7-6(3)]
- C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.13 Monitoring Methods [326 IAC 3]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
[326 IAC 2-7-6] [326 IAC 1-6]
- C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]
- C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
- C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

Stratospheric Ozone Protection

- C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - Three (3) boilers

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 PSD Minor Limit and Sulfur Dioxide Limitations [326 IAC 2-2] [40 CFR 52.21] [326 IAC 7-1]
- D.1.2 Particulate Matter (PM) [326 IAC 6-2-3]
- D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.1.5 Sulfur Dioxide (SO₂)
- D.1.6 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Compliance Monitoring Requirements

- D.1.7 Visible Emission Notations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.8 Record Keeping Requirements
- D.1.9 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Twenty-one (21) engine test cells

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]
- D.2.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-1.1-2]

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

D.2.4 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 Record Keeping Requirements

D.2.6 Reporting Requirements

D.3 FACILITY OPERATION CONDITIONS - One (1) packaging test cell

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Record Keeping Requirements

D.3.4 Reporting Requirements

D.4 FACILITY OPERATION CONDITIONS - One (1) power module

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

D.4.2 Volatile Organic Compounds (VOC)

D.4.3 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-1.1-2]

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

D.4.5 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.6 Record Keeping Requirements

D.4.7 Reporting Requirements

D.5 FACILITY OPERATION CONDITIONS - One (1) dual fuel 3600 test stand

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.3 Record Keeping Requirements

D.5.4 Reporting Requirements

D.6 FACILITY OPERATION CONDITIONS - Five (5) peak shaving and six (6) trailer mounted diesel generators

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

D.6.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-1.1-2]

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.6.5 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.6.6 Record Keeping Requirements
- D.6.7 Reporting Requirements

D.7 FACILITY OPERATION CONDITIONS - Three (3) product paint booths

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.7.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
- D.7.3 Volatile Organic Compound (VOC) [326 IAC 2-2]
- D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.7.5 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.7.6 Volatile Organic Compound (VOC) [326 IAC 8-2-9]
- D.7.7 Particulate Matter (PM)

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.7.8 Monitoring

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.7.9 Record Keeping Requirements

D.8 FACILITY OPERATION CONDITIONS - Insignificant Activities

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.8.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]
- D.8.2 Performance Standards for Volatile Organic Storage Tanks [40 CFR Part 60, Subpart Ka]

Compliance Determination Requirements

- D.8.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

D.9 FACILITY OPERATION CONDITIONS - One (1) British Petroleum/Dowell and oil fracturing rig testing site

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.9.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.9.2 Record Keeping Requirements
- D.9.3 Reporting Requirements

Certification Form

Emergency/Deviation Occurrence Report

Natural Gas Fired Boiler Certification

Quarterly Report Forms

Quarterly Compliance Monitoring Form

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 7 of 80
OP No. T157-7594-00044

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary internal combustion engine manufacturing source.

Responsible Official:	Warren Ewalt
Source Address:	3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address:	3701 State Road 26 East, Lafayette, Indiana 47905
SIC Code:	3519
County Location:	Tippecanoe
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program
	Major Source, under PSD Rules
	Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) boilers, identified as BY24010, BY24011, and BY24012, constructed in 1979, fired by natural gas or no. 2 fuel oil, with a maximum capacity of 83.3 million British thermal units per hour, each, exhausting to stack B-1.
- (b) Twenty (20) 3500 engine test cells, identified as M501 through M520, constructed in 1979, with a maximum heat input capacity of 7.6 million British thermal units per hour, each, when operating on diesel fuel and 6.1 million British thermal units per hour, each, when operating on natural gas, exhausting at stack vents W-4 (A through T).
- (c) One (1) 3600 engine test cell, identified as M522, constructed in 1979, with a maximum heat input capacity of 7.6 million British thermal units per hour when operating on diesel fuel and 6.1 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-8 (A and B).
- (d) One (1) packaging test cell, identified as M525, constructed in September 1988, with a maximum heat input capacity of 20.3 million British thermal units per hour when operating on diesel fuel and 13.7 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-9 (A through D).
- (e) One (1) power module for parallel testing, identified as M547, constructed in October 1991, with a maximum heat input capacity of 16.9 million British thermal units per hour when operating on diesel fuel and 16.9 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-10.
- (f) One (1) dual fuel 3600 test stand, identified as M523, constructed in March 1994, with a

maximum heat input capacity of 15.3 million British thermal units per hour when operating on diesel fuel and 11.0 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-11 (A and B).

- (g) Three (3) peak shaving diesel generators, identified as EL45016, constructed in January 1995, with a maximum heat input capacity of 42.4 million British thermal units per hour, total, exhausting at stack vents W-13 and W-14.
- (h) One (1) product paint booth, identified as M751, constructed in 1979, equipped with electrostatic airless spray guns and dry filters for overspray controls, exiting at stack W-1, capacity: 15 engines per hour.
- (i) One (1) product paint booth, identified as M775, constructed in 1979, equipped with electrostatic airless spray guns and dry filters for overspray controls, exiting at stack W-2, capacity: 2.09 engines per hour.
- (j) One (1) product paint booth, identified as W-3, constructed in 1979, equipped with electrostatic airless spray guns and dry filters and a water wash system for overspray controls, capacity: 1.25 to 5.25 engines per hour.
- (k) Two (2) peak shaving diesel generators, also used as emergency generators, constructed in 1982, one (1) existing in Building R and one (1) existing in building B, maximum heat input capacity: 13.0 million British thermal units per hour, total.
- (l) Six (6) trailer mounted generator sets, identified as Power Generators 1-6, located east of Building N, each rated at 1825 kw (prime power) with a maximum fueling rate of 123.9 gallons of No.2 diesel fuel per hour (0.5 sulfur content)
- (m) One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, constructed in February 1996, with a maximum heat input capacity of 8.5 million British thermal units per hour when operating on diesel fuel and 8.5 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (c) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
 - (1) One (1) diesel fuel tank, capacity: 150,000 gallons.

- (2) One (1) No. 2 heating fuel oil tank, capacity: 400,000 gallons.
- (3) One (1) maintenance paint booth installed in 1979.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

~~B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]~~

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAQ, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision; and
 - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

-
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ.

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:

- (1) The applicable requirements are included and specifically identified in this permit; or
- (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) An emergency as defined in 326 IAC 2-7-1(12); or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination

[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information

shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due. [326 IAC 2-5-3]

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 20 of 80
OP No. T157-7594-00044

Indianapolis, Indiana 46206-6015

Any such application should be certified by the “responsible official” as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]
[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-1 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20 (b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
 - (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
 - (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
- (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAQ, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAQ, nor an authorized representative, may disclose the information unless and until IDEM, OAQ, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAQ, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]

Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAQ, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due

April 1 of each year.

- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]
Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- C.2 Opacity [326 IAC 5-1]
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- C.7 Stack Height [326 IAC 1-7]
The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]
(a) Notification requirements apply to each owner or operator. If the combined amount of

regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

-
- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.10 Compliance Schedule [326 IAC 2-7-6(3)]

The Permittee:

- (a) Has certified that all facilities at this source are in compliance with all applicable requirements; and
- (b) Has submitted a statement that the Permittee will continue to comply with such requirements; and
- (c) Will comply with such applicable requirements that become effective during the term of this permit.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on December 12, 1996.
- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (d) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (e) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:
 - (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

- (3) A verification to IDEM, OAQ, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAQ, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
[326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 31 of 80
OP No. T157-7594-00044

- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting

January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
- (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;

- (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.

- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.

- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.22 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) Three (3) boilers, identified as BY24010, BY24011, and BY24012, constructed in 1979, fired by natural gas or no. 2 fuel oil, with a maximum capacity of 83.3 million British thermal units per hour, each, exhausting to stack B-1.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit and Sulfur Dioxide Emission Limitations [326 IAC 2-2] [40 CFR 52.21] [326 IAC 7-1]

- (a) Pursuant to PC (79) 1414, issued July 25, 1979, the sulfur content of the fuel oil shall not exceed 0.29% unless the actual steam rate is such that the combination of steam rate and a higher sulfur content will result in an annual SO₂ emissions of less than 246 tons of sulfur dioxide per twelve (12) consecutive months. This will satisfy the requirements of 326 IAC 7-1.1-2, Sulfur Dioxide Emission Limitations.
- (b) Pursuant to OP 79-04-91-0408, OP 79-04-91-0409, and OP 79-04-91-0410, issued on October 27, 1987, the maximum combined flow rate of steam from the three (3) boilers shall not exceed 140,000 pounds per hour.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6-2-3]

Pursuant to CP 73-04-91-0408 issued October 27, 1987, the three (3) boilers, identified as BY24010, BY24011, and BY24012, constructed in 1979, with maximum capacities of 83.3 million British thermal units per hour, shall be limited to PM emissions of 0.6 pound per million British thermal units of heat input.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the SO₂ and PM limits specified in Condition D.1.1(a) and D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.5 Sulfur Dioxide (SO₂)

Compliance with the steam flow rate limitations contained in Condition D.1.1 shall be determined by a turbine meter in the common header of the three (3) boilers. The total steam load in flow rate per hour, total flow per 24 hour period, and total annual flow will be determined by computer and recorded.

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 38 of 80
OP No. T157-7594-00044

D.1.6 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Compliance with Condition D.1.1 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed the limits contained in Condition D.1.1 by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the three (3) 83.3 MMBtu per hour boilers, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Visible Emissions Notations

- (a) Daily visible emission notations of the boiler stack (B-1) exhaust shall be performed during normal daylight operations when burning no. 2 fuel oil and exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.8 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 40 of 80
OP No. T157-7594-00044

- (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below.
 - (1) The total steam load in flow rate per hour.
 - (2) The total steam load in total flow per 24 hour period.
 - (3) Total annual flow.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.9 Reporting Requirements

- (a) The natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported.
- (b) A quarterly summary of the information to document compliance with Condition D.1.1 (a) shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (b) Twenty (20) 3500 engine test cells, identified as M501 through M520, constructed in 1979, with a maximum heat input capacity of 7.6 million British thermal units per hour, each, when operating on diesel fuel and 6.1 million British thermal units per hour, each, when operating on natural gas, exhausting at stack vents W-4 (A through T).
- (c) One (1) 3600 engine test cell, identified as M522, constructed in 1979, with a maximum heat input capacity of 7.6 million British thermal units per hour when operating on diesel fuel and 6.1 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-8 (A and B).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the twenty-one (21) engine test cells shall be limited to 1,062 kilogallons per twelve (12) consecutive months. For the purposes of this NO_x limit, one (1) million cubic feet natural gas usage by the twenty (20) engine test cells (M501-M520) is equivalent to 6.81 kilogallons of diesel fuel at the test cells, and one (1) million cubic feet of natural gas usage at the one (1) engine test cell (M522) is equivalent to 0.640 kilogallons of diesel fuel at the test cells. This usage limit is required to limit the potential to emit of NO_x to less than 250 tons per year. As a result of this limit, CO and VOC emissions will be limited to less than 250 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.2.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-1.1-2]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the twenty-one (21) engine test cells shall not exceed five tenths (0.5) pound per million British thermal unit heat input.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the NO_x, CO, and VOC limits specified in Condition D.2.1 and the SO₂ limit specified in Condition D.2.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.2.4 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed the limits contained in Condition D.2.2 by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures

in 40 CFR 60, Appendix A, Method 19.

- (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
- (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the twenty-one (21) engine test cells, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.
- (c) Compliance may also be determined by a certification that all purchased fuels are motor vehicle highway fuels.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.5 Record Keeping Requirements

- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.2.1, the Permittee shall maintain monthly records of the amount of diesel fuel used at the twenty-one (21) engine test cells, the natural gas usage at the twenty (20) engine test cells (M501-M520), and the natural gas usage at the one (1) engine test cell (M522).

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (d) One (1) packaging test cell, identified as M525, constructed in September 1988, with a maximum heat input capacity of 20.3 million British thermal units per hour when operating on diesel fuel and 13.7 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-9 (A through D).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the one (1) packaging test cell shall be limited to 166 kilogallons per twelve (12) consecutive months. For the purposes of this NO_x limit, one (1) million cubic feet of natural gas usage shall be equivalent to 0.640 kilogallons of diesel fuel usage. This usage limit is required to limit the potential to emit of NO_x to less than 40 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Compliance Determination Requirements

D.3.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the NO_x limit specified in Condition D.3.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain monthly records of the amount of diesel fuel and natural gas used at the one (1) packaging test cell.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (e) One (1) power module for parallel testing, identified as M547, constructed in October 1991, with a maximum heat input capacity of 16.9 million British thermal units per hour when operating on diesel fuel and 16.9 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-10.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the one (1) power module shall be limited to 166 kilogallons per twelve (12) consecutive months. For the purposes of this NO_x limit, one (1) million cubic feet of natural gas usage shall be equivalent to 1.14 kilogallons of diesel fuel usage. This usage limit is required to limit the potential to emit of NO_x to less than 40 tons per year. As a result of this limit PM_{10} emissions are limited to less than 15 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.4.2 Volatile Organic Compound (VOC) Limit

The input of natural gas to the one (1) power module shall be limited to 76.1 million cubic feet per twelve (12) consecutive months. For the purposes of this VOC limit, one (1) kilogallon of diesel fuel usage shall be equivalent to 0.051 million cubic feet of natural gas usage. This usage limit is required to limit the potential to emit of VOC to less than 25 tons per year. Compliance with this limit makes 326 IAC 8-1-6 (New facilities; General reduction requirements) not applicable.

D.4.3 Sulfur Dioxide (SO_2) Limitations [326 IAC 7-1.1-2]

Pursuant to CP 157-4037, issued December 16, 1994, the SO_2 emissions from the one (1) power module for parallel testing shall not exceed five tenths (0.5) pounds per million British thermal unit heat input.

Compliance Determination Requirements

D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the NO_x and PM_{10} limits specified in Condition D.4.1, the VOC limit specified in Condition D.4.2, and the SO_2 limit specified in Condition D.4.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.4.5 Sulfur Dioxide (SO_2) Emissions and Sulfur Content

Compliance with Condition D.4.3 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed the limits contained in Condition D.4.3 by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the one (1) power module, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.
- (c) Compliance may also be determined by a certification that all purchased fuels are motor vehicle highway fuels.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.6 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Conditions D.4.1 and D.4.2, the Permittee shall maintain monthly records of the amount of diesel fuel and natural gas used at the one (1) power module.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping

Requirements, of this permit.

D.4.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.4.1 and D.4.2 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.5

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (f) One (1) dual fuel 3600 test stand, identified as M523, constructed in March 1994, with a maximum heat input capacity of 15.3 million British thermal units per hour when operating on diesel fuel and 11.0 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-11 (A and B).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the one (1) dual fuel 3600 test stand shall be limited to 166 kilogallons per twelve (12) consecutive months. For the purposes of this NO_x limit, one (1) million cubic feet of natural gas usage shall be equivalent to 0.640 kilogallons of diesel fuel usage. This usage limit is required to limit the potential to emit of NO_x to less than 40 tons per year. As a result of this limit, PM₁₀ emissions are limited to less than 15 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the NO_x and PM₁₀ limits specified in Condition D.5.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.3 Record Keeping Requirements

- (a) To document compliance with Condition D.5.1, the Permittee shall maintain monthly records of the amount of diesel fuel and natural gas used at the one (1) dual fuel 3600 test stand.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.6

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (g) Three (3) peak shaving diesel generators, identified as EL45016, constructed in January 1995, with a maximum heat input capacity of 42.4 million British thermal units per hour, total, exhausting at stack vents W-13 and W-14.
- (k) Two (2) peak shaving diesel generators, also used as emergency generators, constructed in 1982, one (1) existing in Building R and one (1) existing in building B, maximum heat input capacity: 13.0 million British thermal units per hour, total.
- (l) Six (6) trailer mounted generator sets, identified as Power Generators 1-6, located east of Building N, each rated at 1825 kw (prime power) with a maximum fueling rate of 123.9 gallons of No.2 diesel fuel per hour (0.5 sulfur content)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The input of diesel fuel to the five (5) peak shaving diesel generators shall be limited to 166 kilogallons per twelve (12) consecutive months. This usage limit is required to limit the potential to emit of NO_x to less than 40 tons per year. As a result of this limit, CO emissions are limited to less than 100 tons per year, PM emissions are limited to less than 25 tons per year, and PM₁₀ emissions are limited to less than 15 tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.
- (b) The input of No.2 diesel fuel to the six trailer mounted generator sets shall be limited to less than 114412.87 gallon per year based on a 12 consecutive months. The usage limit is required to limit the potential to emit of NO_x to less than twenty five (25) tons/yr. Compliance with this limit makes 326 IAC 2-7-10.5 (f) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.6.2 Sulfur Dioxide (SO₂) Limitations [326 IAC 7-1.1-2]

Pursuant to CP 157-4123, issued January 9, 1995, and 326 IAC 7-1.1-2 the SO₂ emissions from the five (5) peak shaving diesel generators shall not exceed five tenths (0.5) pound per million British thermal unit heat input.

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facilities are in compliance. If testing is required by IDEM, compliance with the NO_x, CO, and PM₁₀ limits specified in Condition

D.6.1 and the SO₂ limit specified in Condition D.6.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.6.5 Sulfur Dioxide (SO₂) Emissions and Sulfur Content

Compliance with Condition D.6.2 shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed the limits contained in Condition D.6.2 by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the one (1) peak shaving diesel generator, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.6 Record Keeping Requirements

- (a) To document compliance with Condition D.6.2, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the

monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.6.1, the Permittee shall maintain monthly records of the amount of diesel fuel used at the five (5) peak shaving diesel generators.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.7 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.6.1 shall be submitted to the address(es) listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (h) One (1) product paint booth, identified as M751, constructed in 1979, equipped with electrostatic airless spray guns and dry filters for overspray controls, exiting at stack W-1, capacity: 15 engines per hour.
- (i) One (1) product paint booth, identified as M775, constructed in 1979, equipped with electrostatic airless spray guns and dry filters for overspray controls, exiting at stack W-2, capacity: 2.09 engines per hour.
- (j) One (1) product paint booth, identified as W-3, constructed in 1979, equipped with electrostatic airless spray guns and dry filters and a water wash system for overspray controls, capacity: 1.25 to 5.25 engines per hour.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from the three (3) product paint booths (M751, M775 and W-3) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.7.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

Pursuant to the amendment to OP 79-04-91-0411, issued October 7, 1992, the volume weighted average volatile organic compound (VOC) content of coating applied to the engines shall be limited to 3.5 pounds of VOCs per gallon of coating less water, as delivered to the applicator for any calendar day, for air dried or forced warm air dried coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.7.3 Volatile Organic Compounds (VOC) [326 IAC 2-2]

- (a) Any change or modification to these existing facilities which may increase the potential to emit VOC to 250 tons per year, or more, shall cause the facilities to be subject to 326 IAC 2-2, Prevention of Significant Deterioration (PSD) and shall require prior IDEM, OAQ, approval.
- (b) Any change or modification that increases the potential to emit VOC from the two (2) product paint booths (M775 and W-3) by 1.2 tons per year, or more, will increase the potential to emit VOC from the Source Modification, 157-12768-00044, to 40 tons per year, or more. Therefore, the change or modification shall cause the facilities to be subject to 326 IAC 2-2, Prevention of Significant Deterioration (PSD) and shall require prior IDEM, OAQ, approval.

D.7.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.7.5 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.7.6 Volatile Organic Compounds

Compliance with the VOC content limitation contained in Condition D.7.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) using formulation data supplied by the coating manufacturer. However, IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.7.7 Particulate Matter (PM)

The dry filters and water wash system for overspray control shall be in operation at all times when the three (3) product paint booths (M751, M775 and W-3) exhausting to that control device are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.8 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters and water wash system. To monitor the performance of the dry filters and water wash system, weekly observations shall be made of the overspray from the paint booth stack(s) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.9 Record Keeping Requirements

- (a) To document compliance with Condition D.7.2, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken

daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.7.2.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates in which each coating is disbursed to the paint booths and a log of dates of use for each coating with a VOC content greater than 3.5 pounds per gallon;
 - (3) The volume weighted VOC content of the coatings used for each day on days when a coating with a VOC content greater than 3.5 pounds per gallon is used.
- (b) To document compliance with Conditions D.7.1 and D.7.7, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPS: brazing equipment, cutting torches soldering equipment, welding equipment.
- (b) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (c) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
 - (1) One (1) diesel fuel tank, capacity: 150,000 gallons.
 - (2) One (1) No. 2 heating fuel oil tank, capacity: 400,000 gallons.
 - (3) One (1) maintenance paint booth installed in 1979.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the insignificant activities of brazing, cutting, soldering, and welding, the grinding and machining operations, and the one (1) maintenance paint booth shall not exceed allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.8.2 Performance Standards for Volatile Organic Storage Tanks [40 CFR Part 60, Subpart Ka]

The diesel fuel tank with a capacity of 150,000 gallons and the no. 2 fuel oil tank with a capacity of 400,000 gallons are subject to the requirements of 40 CFR Part 60, Subpart Ka. Should the true vapor pressure of the petroleum liquid stored in either tank at any time exceed 1.0 psia, the owner or operator of the tanks shall comply with the record keeping requirements of 40 CFR Part 60.114a. Should, at any time, the true vapor pressure of the liquid stored exceed 1.5 psia, the tanks will become subject to the requirements of 40 CFR Parts 60.112a and 60.113a. A copy of this rule is attached.

Compliance Determination Requirement

D.8.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is

required by IDEM, compliance with the PM limit specified in Condition D.8.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

SECTION D.9

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (m) One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, constructed in February 1996, with a maximum heat input capacity of 8.5 million British thermal units per hour when operating on diesel fuel and 8.5 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the one (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, shall be limited to 166 kilogallons per twelve (12) consecutive months. For the purposes of this NO_x limit, one (1) million cubic feet of natural gas usage shall be equivalent to 5.97 kilogallons of diesel fuel usage. This usage limit is required to limit the potential to emit of NO_x to less than forty (40) tons per year. As a result of this limit, PM₁₀ emissions are limited to less than fifteen (15) tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Compliance Determination Requirements

There are no compliance determination requirements for this facility.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.2 Record Keeping Requirements

- (a) To document compliance with Condition D.9.1, the Permittee shall maintain monthly records of the amount of diesel fuel and natural gas used at the one (1) British Petroleum/ Dowell and oil fracturing rig testing site, identified as M528.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.9.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

- 9** 1. This is an emergency as defined in 326 IAC 2-7-1(12)
- ☐ The Permittee must notify the Office of Air Quality (OAQ), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - ☐ The Permittee must submit notice in writing or by facsimile within two **(2)** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

- 9** 2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c)
- ☐ The Permittee must submit notice in writing within ten **(10)** calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 64 of 80
OP No. T157-7594-00044

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel

From

To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature: _____

Printed Name: _____

Title/Position: _____

Date: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: Three (3) boilers - Section D.1
Parameter: SO₂ emissions
Limit: No more than 246 tons per twelve (12) consecutive months

YEAR: _____

Month	This Month	Previous 11 Months	12-Month Total
	SO ₂ emissions (tons)	SO ₂ emissions (tons)	SO ₂ emissions (tons)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: Twenty-one (21) engine test cells - Section D.2
Parameter: NO_x; fuel usage
Limit: 1,062 kilogallons of diesel fuel per twelve (12) consecutive months.
One (1) mmcf natural gas usage at the twenty (20) engine test cells (M501-M520) is equivalent to 6.81 kilogallons of diesel fuel, and
One (1) mmcf of natural gas usage at the one (1) engine test cell (M522) is equivalent to 0.640 kilogallons of diesel fuel
NO_x, CO and VOC emissions to less than 250 tons per year
YEAR: _____

Month	This Month					Previous 11 Months	12-Month Total
	Natural Gas usage (M501-M520) (mmcf)	Diesel Equivalent (6.81 x natural gas usage at M501-M520) (kgal)	Natural gas usage (M522) (mmcf)	Diesel Equivalent (0.640 x natural gas usage at M522) (kgal)	Diesel fuel usage (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)

- 9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: One (1) packaging test cell - Section D.3
Parameter: NO_x; fuel usage
Limit: 166 kilogallons of diesel fuel per twelve (12) consecutive months.
One (1) million cubic feet of natural gas usage is equivalent to 0.640 kilogallons of diesel fuel usage.
NO_x emissions to less than 40 tons per year

YEAR: _____

Month	This Month			Previous 11 Months	12-Month Total
	Natural gas usage (mmcf)	Diesel equivalent (0.640 x natural gas usage) (kgal)	Diesel fuel usage (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 69 of 80
OP No. T157-7594-00044

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: One (1) power module - Section D.4
Parameter: NO_x; fuel usage
Limit: 166 kilogallons of diesel fuel per twelve (12) consecutive months.
One (1) million cubic feet of natural gas usage is equivalent to 1.14 kilogallons of diesel fuel usage.
NO_x emissions to less than 40 tons per year and PM₁₀ emissions to less than 15 tons per year

YEAR: _____

Month	This Month			Previous 11 Months	12-Month Total
	Natural gas usage (mmcf)	Diesel equivalent (1.14 x natural gas usage) (kgal)	Diesel fuel usage (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)

- 9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 71 of 80
OP No. T157-7594-00044

Phone:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: One (1) power module - Section D.4
Parameter: VOC; fuel usage
Limit: 76.1 million cubic feet of natural gas per twelve (12) consecutive months. One (1) kilogallon of diesel fuel usage shall be equivalent to 0.051 million cubic feet of natural gas usage
VOC emissions to less than 25 tons per year

YEAR: _____

Month	This Month			Previous 11 Months	12-Month Total
	Diesel fuel usage (kgal)	Natural gas equivalent (0.051 x natural gas usage) (mmcf)	Natural gas usage (mmcf)	Natural gas used + natural gas equivalent of diesel fuel used (mmcf)	Natural gas used + natural gas equivalent of diesel fuel used (mmcf)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 73 of 80
OP No. T157-7594-00044

Phone:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: One (1) dual fuel 3600 test stand - Section D.5
Parameter: NO_x; fuel usage
Limit: 166 kilogallons of diesel fuel per twelve (12) consecutive months.
One (1) million cubic feet of natural gas usage is equivalent to 0.640 kilogallons of diesel fuel usage.
NO_x emissions to less than 40 tons per year and PM₁₀ emissions to less than 15 tons per year

YEAR: _____

Month	This Month			Previous 11 Months	12-Month Total
	Natural gas usage (mmcf)	Diesel equivalent (0.640 x natural gas usage) (kgal)	Diesel fuel usage (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Caterpillar, Inc.
Lafayette, Indiana
Permit Reviewer: MES

Second Minor Permit Modification 157-14386-00044
Modified by: MES

Page 75 of 80
OP No. T157-7594-00044

Phone:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: Five (5) peak shaving diesel generators - Section D.6
Parameter: NO_x; fuel usage
Limit: 166 kilogallons of diesel fuel per twelve (12) consecutive months.
NO_x emissions to less than 40 tons per year, CO emissions to less than 100 tons per year, PM emissions to less than 25 tons per year, and PM₁₀ emissions to less than 15 tons per year

YEAR: _____

Month	This Month	Previous 11 Months	12-Month Total
	Diesel fuel usage (kgal)	Diesel fuel usage (kgal)	Diesel fuel usage (kgal)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: Six (6) trailer mounted generator sets - Section D.6
Parameter: Fuel usage
Limit: 114412.87 gallons of diesel fuel per twelve (12) consecutive months.

YEAR: _____

Month	This Month	Previous 11 Months	12-Month Total
	Diesel fuel usage (kgal)	Diesel fuel usage (kgal)	Diesel fuel usage (kgal)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528 - Section D.9
Parameter: NO_x; fuel usage
Limit: 166 kilogallons of diesel fuel per twelve (12) consecutive months.
One (1) million cubic feet of natural gas usage is equivalent to 5.97 kilogallons of diesel fuel usage.
NO_x emissions to less than 40 tons per year and PM₁₀ emissions to less than 15 tons per year

YEAR: _____

Month	This Month			Previous 11 Months	12-Month Total
	Natural gas usage (mmcf)	Diesel equivalent (5.97 x natural gas usage) (kgal)	Diesel fuel usage (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)

- 9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE MONITORING REPORT**

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044

Months: _____ to _____ Year: _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of Each Deviation

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Minor Permit Modification

Source Background and Description

Source Name:	Caterpillar, Inc.
Source Location:	3701 State Road 26 East, Lafayette, Indiana 47905
County:	Tippecanoe
SIC Code:	3519
Operation Permit No.:	T157-7594-00044
Operation Permit Issuance Date:	July 13, 1999
Minor Permit Modification No.:	157-14386-00044
Permit Reviewer:	CarrieAnn Ortolani

The Office of Air Quality (OAQ) has reviewed a modification application from Caterpillar, Inc. relating to the correction of changes made to the existing Operating Permit and a correction of descriptive information.

History

On May 14, 2001, Caterpillar, Inc. submitted an application to the OAQ requesting to correct an error to a previous amendment, which requires adding an existing facility to the operating permit. Caterpillar, Inc. was issued a Part 70 permit (T157-7594-00044) on July 13, 1999. A First Administrative Amendment (157-11363-00044) was issued on October 25, 1999, a First Significant Source Modification (157-11970-00044) was issued on May 15, 2000, a Second Administrative Amendment (157-11889-00044) was issued on May 22, 2000, a Third Administrative Amendment (157-12447-00044) was issued on August 4, 2000, a Second Significant Source Modification (157-12768-00044) was issued on January 4, 2001, and a Fourth Administrative Amendment (157-12859-00044) was issued on January 5, 2001. A First Minor Source Modification (157-14260-00044) was issued on May 25, 2001, and the First Minor Permit Modification (157-14388-00044) to operate that modification will be issued prior to issuance of this Second Minor Permit Modification.

The third Administrative Amendment (157-12447-00044), issued on August 4, 2000, removed the sound attenuation test stand and all of the conditions for that test stand from the permit. However, the description of that test stand, written as follows, was incorrect:

One (1) sound attenuation test stand, identified as M528, constructed in February 1996, with a maximum heat input capacity of 17.0 million British thermal units per hour when operating on diesel fuel and 17.0 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.

This description should have read:

One (1) sound attenuation test stand **and one (1) British Petroleum/Dowell and oil**

fracturing rig testing site, identified as M528, constructed in February 1996, with a **total** maximum heat input capacity of 17.0 million British thermal units per hour when operating on diesel fuel and 17.0 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.

In removing the sound attenuation test stand description from the permit, the one (1) British Petroleum/Dowell and oil fracturing rig test site and all applicable conditions were unintentionally removed from the permit. The Permittee had been applying the limitations for the sound attenuation test stand to the total of the two (2) test sites since they were constructed and permitted together. The one (1) British Petroleum/Dowell and oil fracturing rig testing site has not been removed from the source and the permit should have been modified to delete the sound attenuation test stand from the facility description and change the requirements of the applicable conditions to refer to only the one (1) British Petroleum/Dowell and oil fracturing rig testing site. The Permittee has continued to comply with the requirements of the initial Part 70 Operating Permit for the one (1) British Petroleum/Dowell and oil fracturing rig testing site after those conditions were removed from the permit.

This modification will revise the descriptive information to put the one (1) British Petroleum/Dowell and oil fracturing rig testing site back into the permit. The requirements removed in the third Administrative Amendment 157-12447-00044, issued on August 4, 2000, will be put back into the permit and will reference the one (1) British Petroleum/Dowell and oil fracturing rig testing site. There is no new construction and no modifications to the existing source at this time.

The following emission unit will be added to the permit:

One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, constructed in February 1996, with a maximum heat input capacity of 8.5 million British thermal units per hour when operating on diesel fuel and 8.5 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 14, 2001.

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Minor Permit Modification. Pursuant to 326 IAC 2-7-12, this Minor Permit Modification to the Part 70 Operating Permit, T 039-7594-00172, issued on July 13, 1999, is required to correct descriptive information and add permit requirements that had been erroneously removed in the third Administrative Amendment 157-12447-00044, issued on August 4, 2000. Adding permit requirements that were previously existing is not considered a significant change in reporting or record keeping requirements or a change in a case-by-case

determination of an emission limit or other standard.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in bold):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Three (3) boilers, identified as BY24010, BY24011, and BY24012, constructed in 1979, fired by natural gas or no. 2 fuel oil, with a maximum capacity of 83.3 million British thermal units per hour, each, exhausting to stack B-1.
- (b) Twenty (20) 3500 engine test cells, identified as M501 through M520, constructed in 1979, with a maximum heat input capacity of 7.6 million British thermal units per hour, each, when operating on diesel fuel and 6.1 million British thermal units per hour, each, when operating on natural gas, exhausting at stack vents W-4 (A through T).
- (c) One (1) 3600 engine test cell, identified as M522, constructed in 1979, with a maximum heat input capacity of 7.6 million British thermal units per hour when operating on diesel fuel and 6.1 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-8 (A and B).
- (d) One (1) packaging test cell, identified as M525, constructed in September 1988, with a maximum heat input capacity of 20.3 million British thermal units per hour when operating on diesel fuel and 13.7 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-9 (A through D).
- (e) One (1) power module for parallel testing, identified as M547, constructed in October 1991, with a maximum heat input capacity of 16.9 million British thermal units per hour when operating on diesel fuel and 16.9 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-10.
- (f) One (1) dual fuel 3600 test stand, identified as M523, constructed in March 1994, with a maximum heat input capacity of 15.3 million British thermal units per hour when operating on diesel fuel and 11.0 million British thermal units per hour when operating on natural gas, exhausting at stack vents W-11 (A and B).
- (g) Three (3) peak shaving diesel generators, identified as EL45016, constructed in January 1995, with a maximum heat input capacity of 42.4 million British thermal units per hour, total, exhausting at stack vents W-13 and W-14.
- (h) One (1) product paint booth, identified as M751, constructed in 1979, equipped with electrostatic airless spray guns and dry filters for overspray controls, exiting at stack W-1, capacity: 15 engines per hour.
- (i) One (1) product paint booth, identified as M775, constructed in 1979, equipped with electrostatic airless spray guns and dry filters for overspray controls, exiting at stack W-2, capacity: 2.09 engines per hour.

- (j) One (1) product paint booth, identified as W-3, constructed in 1979, equipped with electrostatic airless spray guns and dry filters and a water wash system for overspray controls, capacity: 1.25 to 5.25 engines per hour.
- (k) Two (2) peak shaving diesel generators, also used as emergency generators, constructed in 1982, one (1) existing in Building R and one (1) existing in building B, maximum heat input capacity: 13.0 million British thermal units per hour, total.
- (l) Six (6) trailer mounted generator sets, identified as Power Generators 1-6, located east of Building N, each rated at 1825 kw (prime power) with a maximum fueling rate of 123.9 gallons of No.2 diesel fuel per hour (0.5 sulfur content)
- (m) **One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, constructed in February 1996, with a maximum heat input capacity of 8.5 million British thermal units per hour when operating on diesel fuel and 8.5 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.**

SECTION D.9

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (m) **One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, constructed in February 1996, with a maximum heat input capacity of 8.5 million British thermal units per hour when operating on diesel fuel and 8.5 million British thermal units per hour when operating on natural gas, exhausting at stack vent W-12A.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The input of diesel fuel to the one (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528, shall be limited to 166 kilogallons per twelve (12) consecutive months. For the purposes of this NO_x limit, one (1) million cubic feet of natural gas usage shall be equivalent to 5.97 kilogallons of diesel fuel usage. This usage limit is required to limit the potential to emit of NO_x to less than forty (40) tons per year. As a result of this limit, PM₁₀ emissions are limited to less than fifteen (15) tons per year. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

Compliance Determination Requirements

There are no compliance determination requirements for this facility.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to this facility.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.2 Record Keeping Requirements

- (a) To document compliance with Condition D.9.1, the Permittee shall maintain monthly records of the amount of diesel fuel and natural gas used at the one (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.9.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.9.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

On January 1, 2001, the name of the Office of Air Management (OAM) was changed to the Office of Air Quality (OAQ). All references to the Office of Air Management or OAM in this permit have been changed Office of Air Quality or OAQ.

The following report form has been added to the permit:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Caterpillar, Inc.
Source Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Mailing Address: 3701 State Road 26 East, Lafayette, Indiana 47905
Part 70 Permit No.: T 157-7594-00044
Facility: One (1) British Petroleum/Dowell and oil fracturing rig testing site, identified as M528 - Section D.9
Parameter: NO_x; fuel usage
Limit: 166 kilogallons of diesel fuel per twelve (12) consecutive months.
One (1) million cubic feet of natural gas usage is equivalent to 5.97 kilogallons of diesel fuel usage.
NO_x emissions to less than 40 tons per year and PM₁₀ emissions to less than 15 tons per year

YEAR: _____

Month	This Month			Previous 11 Months	12-Month Total
	Natural gas usage (mmcf)	Diesel equivalent (5.97 x natural gas usage) (kgal)	Diesel fuel usage (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)	Diesel fuel used + diesel equivalent of natural gas used (kgal)

- 9 No deviation occurred in this quarter.
9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Conclusion

This modification shall be subject to the conditions of the attached Part 70 Minor Permit Modification No. 157-14386-00044.